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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,933

03/11/2004

John Wissinger

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27572

7590

10/20/2006

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 828

BLOOMFIELD HILLS, MI 48303

EXAMINER

AYRES, TIMOTHY MICHAEL

ART UNIT

PAPER NUMBER

3637

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/798,933	Applicant(s) WISSINGER ET AL.	
	Examiner Timothy M. Ayres	Art Unit 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A gas absorption refrigerator is not described in the original disclosure.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 6, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 5 recites the limitation "the first pivot axis" in line 2. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 6 recites the limitation "the first pivot axis" in line 1. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 8 recites the limitation "the first pivot axis" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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8. Claim 8 recites the limitation "the biasing element" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. Claims 1-3, 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,069,088 to Geske. Geske teaches a refrigerator that comprises a housing with a door pivotally coupled to the housing. A striker (28) is connected to the housing. A latching arrangement is carried by the door and includes a handle (20) connected to the door (1) for movement between a first position and a second position. The handle (20) defines an cam surface (21). A pawl (13) is connected to the door for movement between a latched position that is engaged with the striker for securing the door in a closed position and an unlatched position allowing the door to be pivoted from the closed position. The pawl including a cam follower (14) that cooperate with the at least one cam surface such that the handle drives the cam follower along an arcuate path and thereby rotates the pawl from the latched position (Fig 1) to the unlatched position (Fig 4). The handle (20) is pivotally connected to the door for rotation about a first pivot axis (17). The pawl is pivotally connected to the door for rotation about a second pivot axis (17) which is the same as the first pivot axis. The handle carries a biasing element (22) for biasing the handle to the first position via biasing the pawl and cam follower into the handle. The latching arrangement is located at an edge of the door and the handle is generally parallel to the face of the door.

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10. Claims 1-6, 12, 13, 15, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,948,560 to Rop. Rop teaches a refrigerator that comprises a housing with a door pivotally coupled to the housing and particularly focusing on the embodiment seen in figures 4-7. A striker (11a, 12a, 13a) is connected to the housing. A latching arrangement is carried by the door and includes a handle (20a) connected to the door for movement between a first position and a second position. The handle has a first free end attached to the first pivot as seen in figure 7 and a second free end located proximate the cam follower (19a). The handle (20a) defines an cam surface (24a) that is a pin. A pawl (18a, 16a, 17a) is connected to the door for movement between a latched position that is engaged with the striker for securing the door in a closed position and an unlatched position allowing the door to be pivoted from the closed position. The pawl including a cam follower (19a) that is a curved slot and is driven in arcuate path around a second pivot axis (15a) by the cam surface e(24a) and thereby rotates the pawl from the latched position (Fig 4) to the unlatched position (Fig 5). The pawl is pivotally connected to the door for rotation about a second pivot axis (15a). A biasing element (22a) biases the handle via the slot and pin arrangement of the pawl. The latching arrangement is located at an edge of the door and the handle is generally parallel to the face of the door. The cam surface (24a) is the surface of a pin and therefore is curved. A line can be drawn between the first and seconds pivot axis making them located along said line and the line would be substantially parallel to a front face of the door.

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11. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,915,805 to Lee. Lee teaches a latching arrangement for a refrigerator. A handle (50) has a cam surface that drives a cam follower (63) of a pawl (60) thereby causing the pawl to rotate and unlatch the door. The door is considered latched by the magnets (32) as seen in figure 6 and unlatched as seen in figure 7. The striker is not positively recited and can be considered element (70) or the surface of the housing to fulfill the functional requirements.

12. Claims 1-4, 7, 12, 13, 15-17, 21-23, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,445,709 to Curtiss. Curtiss teaches a latching arrangement for a refrigerator. A handle (36) rotates around a first pivot axis (37) and has a curved cam surface (41) that drives a cam follower (33,40) along an arcuate patch around a pivot axis (32). A pawl (45) engages with a striker (22) to latch the door. The pawl (45) rotates around a second pivot axis (49) due to the force of the cam follower (33) as transferred through pin (42). The second pivot axis (49) is fixed to the door. A leaf spring (38) is carried by the handle and biases the handle to the first position. "Carried by" is interpreted to mean either disposed within or in contact with. The handle (36) is generally parallel with the front face of the door and seen in figure 2. The latching arrangement is substantially disposed within a recess of the and substantially hidden from view. A substantial portion of the handle is disposed within the recess of the door as in figure 2. The first and second pivot axis are disposed rearward from a front face of the refrigerator.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claim 7, 8, 16, and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop in view of US Patent 5,906,423 to Lyu. Rop discloses every element as claimed except a leaf spring carried by the handle for biasing the handle. Lyu teaches a handle for a refrigerator that includes a first pivot axis at a first free end (24) and proximate to the second end is a leaf spring (61) in contact with a ledge (20b) of the handle (20) to force the handle to a first position. The handle (20) is configured as a pull handle in that the handle is moved away from the door to help the door open. At the time of the invention it would have been obvious for a person of

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ordinary skill in the art to make the handle as Rop a pull handle as taught in the embodiment in figure 8 and 9, but use the same slot and pin structure of the embodiment of figures 4-7. This is done by mirroring the slots around the pin so that when the pin is moved with the handle, the slots are driven and thereby cause the pawls to rotate and the motivation for this is that it will be easier to unlatch the door since it is the same motion as needed to continue to open the door. Note: It has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. See MPEP § 2144.04.

16. At the time of the invention it would have been obvious to modify the modified latching arrangement of Rop by adding in a leaf spring and ledge as taught by Lyu to help return the handle to the latched position.

17. Claims 9, 10, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop. Rop discloses every element as claimed except that the handle having a slot curved along its length to define the cam surface. It would have been obvious for a person of ordinary skill in the art to modify the latching arrangement of Rop by having the making the cam surface the curved slot (19a) on the handle and the cam follower the pin (15a) on the pawls, since applicant has not disclosed that having the slots and the cam follower in these locations solves any stated problem or is for any particular purpose and it appears that the latching arrangement would perform equally well with the curved cam surface of the slots being on the pawl and the cam follower being the curved pin on the handle since it is

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functionally equivalent and works equally well. Note: It has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art.

See MPEP § 2144.04.

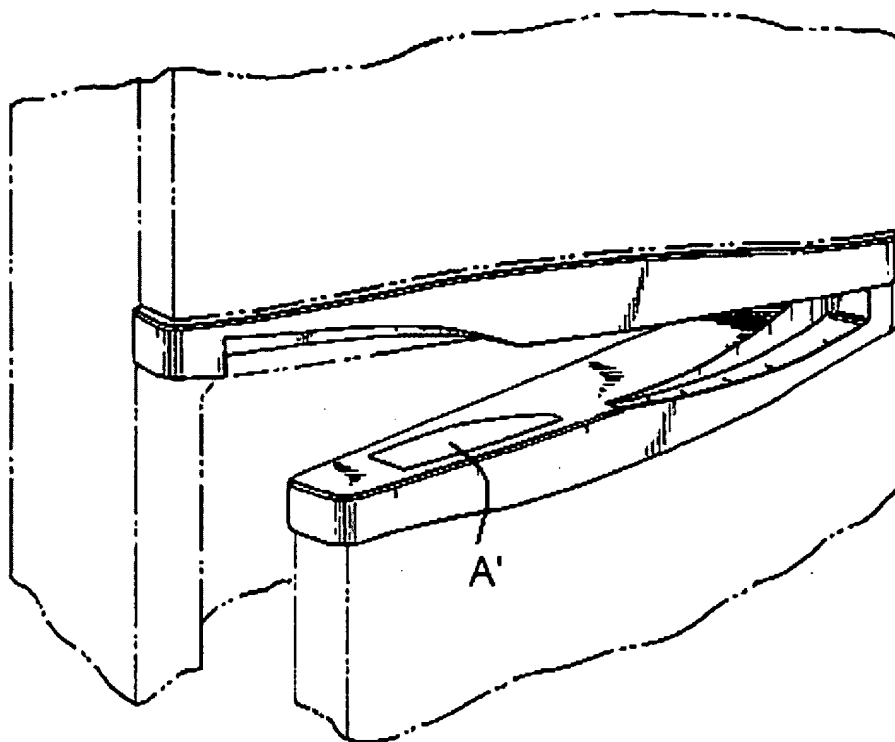
18. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop as applied to claims 9, 10, 18, and 19 above, and further in view of US Patent 2,172,467 to Geddes. Rop discloses every element as claimed and discussed above except the curved slot being defined by a pair of fingers. Geddes teaches a refrigerator latch with a lever arm (18) with a slot (19) defined by a pair fingers on both sides of the slot (19) that have a cam surface that engage a cam follower (20). At the time of the invention it would have been obvious for a person of ordinary skill to modify the handle of Rop by having the slots being open at one end as taught by Geddes, which will make the latching arrangement easier to assemble and once assembled is functionally equivalent and works equally well.

19. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop in view of US Design Patent 430,174 to Negrao. Rop discloses every element as claimed and discussed above except the pivot axes being vertical and each disposed rearward from a front face of the refrigerator and the handle located on a top side of the door and substantially concealed by a perimeter of the door. Negrao teaches a refrigerator with a door that has a handle (A') located in the topside of the door and is concealed by a perimeter of the door. At the time of the invention it

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would have been obvious for a person of ordinary skill to modify the refrigerator of Rop by having the handle located at the top side of the door with the perimeter concealing a portion of it as taught by Negrao to make the refrigerator more aesthetically pleasing. In having the handle concealed behind the perimeter of the door the pivot axis would then be located rearward of front face of the door.

20. Regarding claim 26, Rop in view of Negrao does not expressly disclose the second pivot axis as being vertical. The embodiment as seen in figures 1-3 of Rop have the second pivot axis vertical. It would have been obvious for a person of ordinary skill in the art to modify Rob in view of Negrao by having rotating the sticker and pawl so they function as seen in figures 1-3, since applicant has not disclosed that having the second pivot axis vertical solves any stated problem or is for any particular purpose and it appears that the latching arrangement would perform equally well with the second pivot axis horizontal since it is functionally equivalent and works equally well.



Negrão '174 Figure 1

Response to Arguments

21. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Ayres whose telephone number is (571) 272-8299. The examiner can normally be reached on MON-THU 8:00 - 5:00.

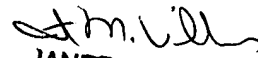
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TMA
10/13/06




JANET M. WILKENS
PRIMARY EXAMINER
Art Unit 3637